

Trachoma: Its Prevalence, Its Effects Upon Vision and the Methods of Control and Eradication. By Gordon L. Berry, Field Secretary National Committee for the Prevention of Blindness. December, 1915. New York: National Committee for the Prevention of Blindness.

This pamphlet of forty pages, issued by the National Committee for the Prevention of Blindness, is written in a style easily understood by the intelligent layman.

By the aid of illustrations and statistics, modes of infection, the appearance of the disease in its different stages, with the direful sequelae in untreated cases of trachoma are very forcibly made evident. Directions are given how to avoid the disease.

As trachoma is far more prevalent in California than most of us realize, this pamphlet should have a wide distribution amongst our teachers, social workers and visiting nurses. A. S. G.

The Mortality From Cancer Throughout the World. By Frederick L. Hoffman, LL.D., F.S.S., F.A.S.A., Statistician to the Prudential Insurance Company of America; Chairman Committee on Statistics, American Society for the Control of Cancer; Member American Association for Cancer Research; Associate Fellow American Medical Association; Associate Member American Academy of Medicine, etc., etc. Octavo 826 pages, 563 tables. The Prudential Press, Newark, New Jersey, 1916.

This volume, dedicated to the American Society for the Control of Cancer and to the American Association for Cancer Research, is one of the most exhaustive that has appeared on the subject of cancer statistics. The author's position eminently fits him to elaborate upon this subject and with the co-operation of the officers of the Federal Government a most complete array of statistics is presented for the physician and layman. The various etiological factors (irritation, trauma, etc.), are dealt with, as well as a rather comprehensive review of occupational influences. Statistics (Karl Pearson and others) show that the probability of an inheritance of a predisposition to cancer is relatively remote. The controversial subject of "cancer-houses," the importance of which has been emphasized by several scientists in England, lacks sufficient evidence statistically to be considered of importance. Numerous tumor classifications contribute to the completeness of the volume. Almost three-quarters of the space is occupied by charts and tables dealing with the morbidity and mortality in the various states and larger cities of this country, as well as the various foreign countries and their larger cities. The incidence of the disease as to age, sex and organ is also tabulated. The differences in prevalence of the disease in the various foreign countries are striking. Though doubtless this is explainable at least in part by differences in efficiency of registration. Striking differences are noted in our largest cities which may not be explained in this way. In some tables one notes references to sarcoma as well as carcinoma. The author has made recommendations to the American Gynecological Society for the National Control of Cancer and among these the most conspicuous are the necessity for organizing an American Society for the purpose of educating the public as to the importance of early operation, for the further study of occupational influences, for dietary studies, for coordinated work with the Department of Agriculture in studying the incidences of the disease in the lower animals and plants. The bibliography and index of authors and subjects appear quite complete in addition to frequent and copious footnotes. Among his concluding statements one notes "that practically all forms of cancer are on the increase" and

"that the evidence of cancer increase throughout the world is an incontrovertible statistical fact" and "that cancer frequency decreases with diminishing distances from the equator." Many statistical studies have called forth adverse criticism in the deductions drawn from certain angles of observation. This book for its comprehensiveness, conciseness and clearness of text and tables may be recommended to the student of the cancer problem. W. T. C.

Gynecology. By William P. Graves, M.D., F.A.C.S., Professor of Gynecology at Harvard Medical School. Octavo volume of 770 pages with 424 original illustrations, 66 of them in colors. Philadelphia and London: W. B. Saunders Company, 1916. Cloth, \$7.00 net; Half Morocco, \$8.50 net.

The very first impression received on opening Graves' Gynecology is favorable and this impression is strengthened with the careful reading of the text and examination of the excellent, clear-cut halftone drawings. The lucid wording, not a sentence of which needs re-reading in order to interpret the author's meaning, demonstrates the well-trained clear thinker.

The first section is a very valuable addition to the subject of gynecology. It marks an innovation to the usual textbook. There are 135 pages devoted to the "Physiology and Relationship of Gynecology to the General Organism." In this present time where the tendency to specialize is so widespread and the student in his senior year is already selecting a specialty, this extensive introduction to gynecology tells better than so many words, the need of several years of general medicine before the mind should become concentrated upon a special line of medicine. The first section is indeed a most valuable part of the book.

The second part dealing with the general diseases of the pelvic organs is written in interesting form, due credit being given to the work of the German investigators. I mention this because occasionally one is startled to find that one of our American writers is apparently the author of what has taken 20 years or more for foreign scientists to build up.

The personality of the author is ever pleasingly present and the reader feels he is getting the result of one man's extensive experience and not an encyclopedia of facts with no key to the good or bad.

The last section, on surgery, is especially good for the student. Many of the cuts are original and excellent. There is just enough explanation to prepare the student to appreciate the operation. Value is given to the operation the author prefers and the discarded operations are happily not resurrected from the older books. The microscopical sections are attractive and of great value.

Altogether it would be difficult to suggest or find a better book for the student or a more delightful one for the general practitioner to peruse.

M. I. J.

The Treatment of Diabetes Mellitus, with Observations Upon the Disease Based Upon One Thousand Cases. By Elliott P. Joslin, M.D., Assistant Professor of Medicine, Harvard Medical School; Consulting Physician, Boston City Hospital; Collaborator to the Nutrition Laboratory of the Carnegie Institution of Washington, in Boston. Octavo, 440 pages, illustrated. Cloth, \$4.50, net. Lea & Febiger, publishers, Philadelphia and New York, 1916.

In diabetes, more than in any other chronic disease, there is a great need for close co-operation between physician and patient. All cases require, at least at the onset of treatment, the closest supervision of the patient by the medical adviser.

And even afterward, periods of close observation are essential to a successful course.

Joslin, with an experience gained in the handling of over 1,000 cases in this country, is well qualified to write on the treatment of diabetes, and his book is fully up to what we expected of him.

There are probably over one-half million diabetics in the United States, the majority of whom must necessarily be treated by the general practitioner. The author has, therefore, tried to make his book as simple and readable as possible, with the plan of treatment advised easy to follow.

There are six sections. I. Statistical Studies Upon the Course and Treatment. II. Important Factors in the Treatment. III. The Examination of the Urine, Blood and Respiration in Diabetes. IV. The Diet in Health and in Diabetes. V. Treatment. VI. Aids in the Practical Management of Diabetic Cases. VII. Foods and Their Composition.

Due to more accurate methods in clinical medicine, diabetes has been recognized more often of late years, hence its apparently greater frequency. What is more important, our methods of treatment have been and are still improving, and it is to educate the profession to this realization that the book is really written.

Much of its contents has been previously published in some form or other by Joslin, himself. Due credit is given Allen for his work, which taught in the main that prolonged starving was not harmful but beneficial to diabetics, and that the dangers of so-called vegetable days and starvation days as formerly used were due to the large amounts of fat given; that its reduction avoids acidosis. Also that starvation safely shortens the period of glycosuria, and thus the work of the physician, also often the stay in hospital.

The best feature in Joslin's book is the care bestowed in faithfully giving all the details of diet employed. A careful perusal should give the average practitioner a clear conception of what is expected of him. It should, however, teach him that much detail is necessary in his treatment of a diabetic and that his duty is not done when he tells him "eat of this list" and "avoid the following." Too often do we see this done, and only too often do we hear the unfortunate statement made by physicians, that small percentages of sugar in the urine do no harm, whereas strenuous dieting does injure the patient. We know the first statement to be untrue; the latter should only reflect upon the maker of the assertion.

Joslin's book should prove a mine of information to the average practitioner. Taken in connection with the very practical book of recipes of Hill and Eckman, it should enable any practitioner to work out the treatment of any case in a manner not only scientific, but full of interest and enjoyment to himself and patients. R. B.

The Kinetic Drive; Its Phenomena and Control.

By George W. Crile, M.D., Professor of Surgery at the Western Reserve University. Octavo of 71 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1916. Cloth, \$2.00 net.

This book is an epitome of a monograph which Dr. Crile has in preparation, and in which he will offer the complete experimental evidence upon which the following themes are founded.

Since the author states that the attitude he has assumed is unwarranted, and awaiting the completed work before looking at this book from too critical a viewpoint,—the following will simply indicate Crile's theme:

Man is an automaton whose primary work is energy transformation and he has a certain set of organs that concern themselves with this transformation, and which during sleep store up energy

"Kineticization" is the process of transformation of potential into kinetic energy, and when the process is speeded up considerably there results what Crile terms the kinetic drive.

The mechanism of kineticization is essentially as follows: The blood being alkaline, its hemoglobin receives oxygen in the lungs and carries it to the brain, where, as the result of the union of oxygen and adrenin and brain cell substance there originate impulses probably identical with electricity. The ability to give out these impulses constitutes the "driving force of the brain," and when the latter is stimulated, in a normal manner, as in a demand for work in walking, etc., impulses are started along pathways in both the central nervous system and the autonomic nervous system, and so reach all the tissues. Certain of the impulses through the autonomic reach the thyroid and the adrenals. The thyroid, thus stimulated, manufactures more iodothyron and the latter by virtue of its iodine content increases the permeability of all the tissues for electricity, so the driving force of the brain has less resistance and will produce greater response to a given stimulus. Likewise the adrenals secrete more adrenin, and the latter enhances the action of the brain driving center and it in turn causes greater production of adrenin—also the small amounts of adrenin present in the body are made the more efficient because of the action of iodothyron mentioned above.

The impulses of brain over the voluntary nerve tracts are sent through more specific areas of the brain and thence to the muscles where they make the final transformation of the energy specific, e. g., for running, fighting, heat production, etc. In the transformation there is a production of acid by-products; the gaseous portion of the latter being excreted through the lung, while the other portions are broken down by the liver into substances which can be eliminated by the kidneys.

This is a picture of the "physiological kineticization" but in the excess kineticization or "drive" there is found a pathological process.

Here the drive is initiated through what Crile is pleased to term contact, distance and chemical ceptors: the contact ceptors reacting to cold, heat and physical injury; the distance ceptors to written and spoken language and to sight and smell; and the chemical ceptors to toxins arising in the course of infection, auto-intoxication, pregnancy, after food excess, in poisoning, insomnia, excessive exertion and intense emotion. Under the excess of stimulation the brain is driven harder; there is more iodothyron—so more tissue permeability to electricity; more adrenin—so, again more activity of driving center of brain, and in addition symptoms and signs of excessive stimulation of the sympathetic—heart rate and force increased, thirst, perspiration, etc.; increased muscular activity—so increase in acid by-products and increased acidity of urine; and finally fatigue and exhaustion.

In addition, the organs begin to show real pathology and Crile gives numerous cuts to show identical pathological change regardless of the nature of the initiator of the drive. He pictures characteristic changes in brain, liver, adrenals, etc.; change in glycogen content of liver and muscles; increased production of adrenin; hyperplasia and increase in iodine content of thyroid; increased acidity of the urine, etc.

He correlates the symptomatology of Grave's disease, certain cardio-vascular and nephritic cases and of diabetes with a whipped up drive.

His considerations of the control of the drive are interesting and important. He would use, in some cases, opiates to control rate of transformation in response to any stimulus; morphine to prevent mobilization of adrenin; morphine and nitrous oxide to block energy transformation and prevent histological changes; alkalis to supply rapidly increasing deficiency of neutralizing bases.